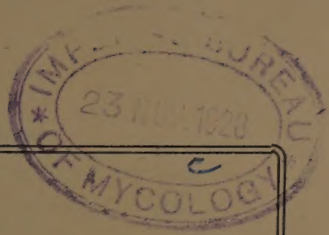


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Note on The Occurrence of Various Tineae in New Orleans

WITH REMARKS ON TRICHOPHYTON
LOUISIANICUM.

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of Louisiana,*
NEW ORLEANS.

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As well known, the principal Tineae may be classified as follows:

- (a) Due to fungi of the genus *Microsporum*-*Microsporiasis*.
- (b) Due to fungi of the genus *Trichophyton*-*Trichophytosis*.
- (c) Due to fungi of the genus *Epidermophyton*-*Epidermophytosis*.
- (d) Due to fungi of the genus *Achorion*-*Favus*.
- (e) Due to fungi of the genus *Endodermophyton*-*Tinea imbricata*.
- (f) Due to fungi of the genus *Malassezia* and genus *Cladosporium*-*Tinea versicolor*, *Tinea flava*, *Tinea nigra*.

*Read before the Orleans Parish Medical Society, March 28th, 1927.

With regard to the comparative frequency of these various Tineae in New Orleans I have not exact statistics, but I think I can come to some general conclusions based on the experience I have had during the last two years, and on the information kindly given me by Professor Menage and Professor Hopkins who have been in charge of the Dermatological Department of the Tulane Medical School and of the Skin Clinic at Charity Hospital for many years.

Microsporiasis, viz., *Tinea capitis* or *corporis* due to *Microsporum audouini*, seems to be extremely rare; in fact, I have not yet seen a case.

Trichophytosis, viz., *Tinea capitis* or *corporis* due to various *Trichophyton*s occurs, but is not very frequent; it is much less frequent than in Europe or the Northern States of America.

Epidermophytosis in all its forms is extremely common.

Tinea favosa or *favus* is exceedingly rare. Dr. Menage and Dr. Hopkins inform me that the few cases they have seen were among immigrants.

Tinea imbricata is absent.

Tinea versicolor and *Tinea flava* are common; *Tinea nigra* due to *Cladosporium*

mansoni and similar fungi is absent, I have seen a case but the infection was probably contracted in Central America.

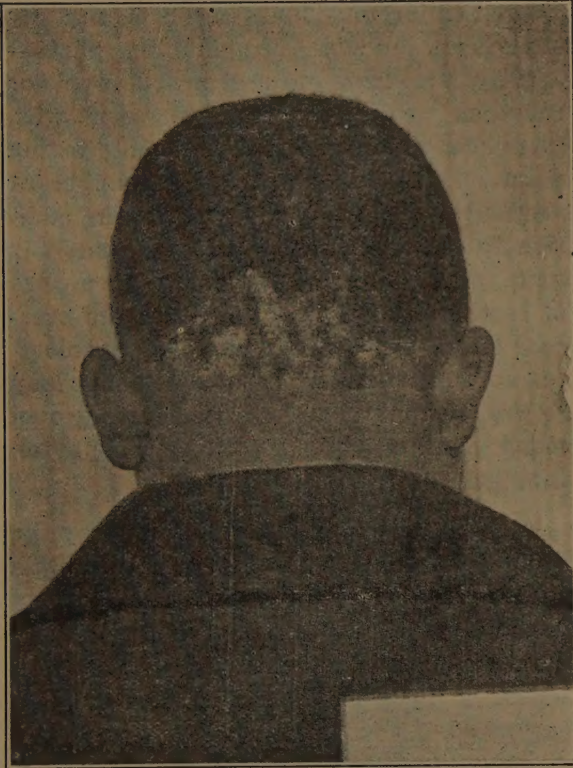


Fig. 1—Trichophytosis due to *Trichophyton louisianicum*

Trichophytosis due to *Trichophyton louisianicum*,—a type of trichophytosis not rare in New Orleans is one caused by the

fungus which I have called *Trichophyton louisianicum*. The fungus may attack the scalp and hair as well as the glabrous regions. So far I have seen it only in colored children. The lesions are generally superficial. When the glabrous parts—usually the neck—are attacked, oval or roundish white patches are seen with pityriasic desquamation; an interesting point is that at times a large number of yeast-like organisms are present in addition to the trichophyton fungus, and it is quite possible that the white appearance of certain patches may be due to the presence of the yeast-like fungus; by mycological cultural methods both organisms may be grown; the yeast-like organism is grown much more easily than the trichophyton fungus.

A moist variety caused apparently by the same fungus is also met with; in this variety the patches show thick crusts rather than scales and the condition may be mistaken with a form of seborrhoea on which a pyogenic infection has become engrafted.

CULTURAL CHARACTERS OF THE FUNGUS.

Acid glucose agar 4%. In fully developed cultures three to four weeks old a fairly abundant growth is noted with a central white portion consisting of white duvet springing up from a rather hard



Fig. 2—*Trichophyton louisianicum*. Acid glucose Agar culture.

mass; the peripheral portion of the growth is yellowish; the submerged portion, viz., the position growing deep into the medium

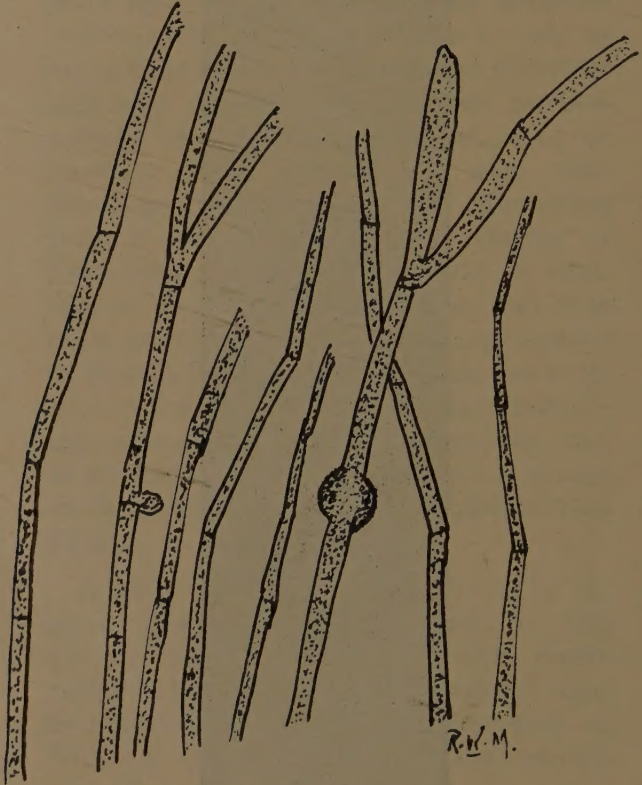


Fig. 3—Microscopic appearance of *Trichophyton lousianicum* from culture.

frequently shows one or two or several spots of reddish, or brownish-reddish color, the reddish color is usually absent in very young cultures.

Glucose agar prepared with peptone water instead of broth.—The appearance of the growth is identical with that observed in cultures on glucose agar prepared with broth, but the yellow color is much more marked.

Neutral glucose agar 1%.—Growth less vigorous; central white knobs; periphery yellowish.

Casein Digest agar 3%.—Growth fairly abundant, covered with white duvet—portions of submerged growth may be reddish or yellowish-reddish.

Acid maltose agar 4%.—Appearance somewhat similar to that noted in glucose agar cultures, but growth less abundant and yellow color much less marked—or may be absent.

Gelatine agar.—Knobby growth, tending to be almost cereberiform, covered with white duvet—peripheral portion may be yellowish.

Glycerine agar.—The fungus grows profusely; the growth is white with at times a yellowish tinge.

Gelatine.—The fungus slowly liquefies gelatine; usually liquefaction begins on the third or fourth day.

Sugar media.—No gas is produced in any sugar. A slight amount of acidity is

occasionally present in levulose and a few other sugars after three weeks incubation.

Microscopical examination of preparation from cultures.—So far the microscopic examination of cultures obtained last year and this year has shown absence of definite spindles, "fuseaux" of the French authors (macroconidia) and if this feature were permanent the fungus could not be placed botanically in either the genus *Trichophyton* or the genus *Microsporum* or the genus *Epidermophyton*. Temporarily I have placed it for convenience sake in the genus *Trichophyton*, section *incertae sedis*. With regard to microscopic features, the fungus must be separated from the following organisms: *Trichophyton sulphureum*, *Microsporum flavescens*, *Trichophyton ochraceum*, *Trichophyton flavum*.

In contrast to *T. sulphureum* there is no speckled appearance and the cultures are not crateriform; moreover in fairly old cultures reddish or brownish-reddish spots are often seen in the submerged growth; with regard to *M. flavescens* described by Horta in Brazil, 1912, it appears it was microscopically a typical microsporum fungus; with regard to macroscopic features, the whole growth including apparently the cent was of a yellow color;

Trichophyton achraceum and *Trichophyton flavum* give rise to cerebriform colonies.

Conclusion.—From my own researches as well as from those of Professor Menage and Professor Hopkins it would appear that the following conclusions are correct:

1. *Microsporosis* due to *Microsporum audouini* is extremely rare or absent. I have not yet seen a case.

2. *Trichophytosis* is much less frequent than in the Northern States and in Europe.

3. *Epidermophytosis* in all its forms is extremely common.

4. *Endodermophytosis* (*T. imbricata*) is absent.

5. *Tinea versicolor* and *Tinea flava* are common, while *Tinea nigra* is absent or extremely rare. I saw a case last year but the patient had contracted the affection in Central America.

In this paper I have called attention again to the occurrence of a variety of trichophytosis due to a fungus which I have called *T. louisianicum*. The fungus has the following principal cultural characters: growth fairly abundant, on glucose agar and many other sugar media; in glucose agar the central portion of the growth is

whitish, being covered by white duvet and the peripheral portion is yellow or yellowish and in the deep submerged portion there often are some reddish or brownish reddish spots; the growth is not crateriform. Gelatine is liquefied fairly slowly.

LITERATURE.

Castellani: The Gehrman Lectures, March, 1926.